

Vienna Instruments
Solo Download Instruments
Bass Trumpet
Full Library

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Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments Bass Trumpet. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

"Full" Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will be different than those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content. The list of articulations further down which gives a summary of the Library's contents.

Special Patch configurations which sometimes are part of a Standard Download Instrument may be found in a reserved folder called "98 RESOURCES" in the Full Instrument. E.g., Flute 1 Standard contains the Patch "22D FL1 legato-sus"; in Flute 1 Full, this Patch is called "01 FL1_perf_leg_sustain" and is located in the Resources' subfolder "03 Perf Speed variation". (Apart from that, it also contains more samples.) Other articulations that can be found in the Resources folder are isolated dynamics repetitions in the subfolder "01 Perf Rep dyn" – e.g., the five repetitions of a legato crescendo, divided into separate Patches – and extracted velocity layers of sustained notes in the subfolder "02 Long Notes – Single Layer".

Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

Major and minor runs are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109–127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But of course, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

Note: the Vienna Instruments PRO player software also allows you to play polyphonic Interval performances.

Another variety of interval performance you will come across is the "perf-leg_sus" Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different "e" tones; with sus-legato you won't.

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

A/B switching normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Speed controller switches naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

Abbreviations

Here's a list of abbreviations in Patch names, which will help you to determine a Patch's content even without the help of the Vienna Instruments browser. Please note that not all of the abbreviations may occur in the manual on hand.

Abbreviation	Meaning	Abbreviation	Meaning
+	faster articulation (runs and arpeggios)	lo	long
150, 160, ...	150, 160, ... BPM (beats per minute)	ma	major
1s, 2s, ...	tone length 1 sec., 2 sec., ...	marc	marcato
acc	accelerando	me	medium
all	combination of all Patches of a category	mi	minor
arp	arpeggio	mord	mordent
blare	"blared" tones (horn)	mu	muted
cre	crescendo	muA, muB	muted, variation A/B
dim	diminuendo	nA	normal attack
dm	diminished (arpeggios)	noVib	without vibrato
dyn	dynamics (crescendo and diminuendo)	perf-rep	repetition performance
dyn5, dyn9	dynamics, 5/9 repetitions	por	portato
fa	fast	run	octave run
faT	fast triplets	sA	soft attack
fA	fast attack	sl	slow
fA_auto	attack automation (normal/fast attack)	sta, stac	staccato
fast-rep	fast repetitions	sto	stopped (horns)
flatter	flutter tonguing	str	strong
fx	effect sound	sus	sustained
gliss	glissando	T	triplets
hA	hard attack	tune	"tuning in" articulation
leg	legato	UB	upbeat
li	light	UB-a1, -a2	1, 2 upbeats
		v1, v2 ...	1st, 2nd, ... variation
		Vib	with (medium) vibrato
		Vib-progr	progressive vibrato
		XF	cell crossfade Matrix

Articulations

53 Bass trumpet	
01 SHORT + LONG NOTES	Staccato Portato short, with normal and soft attack Portato medium with and without vibrato, marcato, and with soft attack Portato long, with normal (2 variations), progressive, and without vibrato, marcato and soft attack Sustained with normal, light, progressive, and without vibrato
02 DYNAMICS	Medium crescendo and diminuendo with vibrato, 1.5, 3, and 5 sec.; without vibrato, 1, 1.5, 2, 3, and 4 sec. Strong crescendo and diminuendo with vibrato, 3, 4, and 6 sec.; without vibrato, 1, 1.5, 2, 3, 4, and 6 sec. pfp with vibrato, 6 sec. pfp without vibrato, 4, 6 and 8 sec. Fortepiano, sforzato, sforzatissimo
03 FLATTER + TRILLS	Flutter tonguing, normal and crescendo Trills, minor and major 2nd
10 PERF INTERVAL	Legato with and without vibrato, normal and with sustain crossfading Marcato
11 PERF INTERVAL FAST	Legato Marcato
12 PERF REPETITION	Legato slow and fast, normal and dynamics Portato, normal and crescendo Staccato slow and fast, normal and crescendo
13 FAST REPETITION	Staccato, 9 repetitions, 150 to 180, and 200 BPM Normal and crescendo
14 UPBEAT REPETITION	1–3 upbeats, 80–140, 160, 180, and 200 BPM
15 GRACE NOTES	Grace notes, minor and major 2nd, up and down

The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.



- | | |
|---------------------------|---------------------------------|
| 1 1st and 2nd violin | 9 Bassoon, contrabassoon |
| 2 Viola | 10/11 Trumpet |
| 3 Cello | 12/13 Horn |
| 4 Double bass | 14/15 Trombone |
| 5 Harp | 16 Tuba |
| 6 Concert flute, piccolo | 17 Timpani |
| 7 Oboe, English horn | 18 Drums, cymbals |
| 8 Clarinet, bass clarinet | 19 other percussion instruments |

Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

53 Bass trumpet

The instrument

Description

The bass trumpet was introduced to the orchestra by Richard Wagner in his “Ring of the Nibelung” to symbolize the fortitude and dominance of his heroes. The instrument is found chiefly in late Romantic orchestral works by Wagner, Strauss, Stravinsky and Janacek. In today’s orchestral practice the bass trumpet is played by a trombonist because the instrument’s mouthpiece is similar in size to the trombone’s.

Range and notation

The bass trumpet in Bb has a range from E2–C5. It is notated in treble clef; being a transposing instrument it is written a major ninth higher than it sounds.


Sound characteristics

The bass trumpet has a mighty, full and dark timbre, which exhibits the typical trumpet characteristics in all registers. In the low register it is similar to the timbre of the tenor trombone, although it lacks the latter’s warmth and fullness.

Combination with other instruments

Generally the bass trumpet is used in combination with other trumpets and brass instruments, for example in octaves as the bottom trumpet part, as the fundamental note of a trumpet chord or as the highest voice together with trombones. The enormous dynamic intensity of a note played fortissimo in the lower register corresponds roughly to three trumpets or four horns.

Patches

01 SHORT + LONG NOTES		Range: D2–C#5		
01 BTr_staccato			Samples: 198	RAM: 12 MB
Staccato 3 velocity layers 4 Alternations				
02 BTr_portato_short			Samples: 198	RAM: 12 MB
Portato, short 3 velocity layers 4 Alternations				
03 BTr_portato_short_soft			Samples: 198	RAM: 12 MB
Portato, short, soft attack 3 velocity layers 4 Alternations				
04 BTr_portato_medium_Vib			Samples: 198	RAM: 12 MB
Portato, medium, with vibrato 3 velocity layers 4 Alternations				
05 BTr_portato_medium_noVib			Samples: 198	RAM: 12 MB
Portato, medium, without vibrato 3 velocity layers 4 Alternations				
06 BTr_portato_medium_marc			Samples: 66	RAM: 4 MB
Portato, medium, marcato 2 velocity layers 2 Alternations				
07 BTr_portato_medium_soft			Samples: 198	RAM: 12 MB
Portato, medium, soft attack 3 velocity layers 4 Alternations				
08 BTr_portato_long-1_Vib			Samples: 212	RAM: 13 MB
Portato, long, with vibrato, var. 1 3 velocity layers Release samples 2 Alternations				

09 BTr_portato_long-2_Vib		Samples: 212	RAM: 13 MB
Portato, long, with vibrato, var. 2 3 velocity layers Release samples 2 Alternations			
10 BTr_portato_long_Vib-progr		Samples: 212	RAM: 13 MB
Portato, long, with progressive vibrato 3 velocity layers Release samples 2 Alternations			
11 BTr_portato_long_noVib		Samples: 212	RAM: 13 MB
Portato, long, without vibrato 3 velocity layers Release samples 2 Alternations			
12 BTr_portato_long_marc		Samples: 146	RAM: 9 MB
Portato, long, marcato 2 velocity layers Release samples			
13 BTr_portato_long_soft		Samples: 212	RAM: 13 MB
Portato, long, soft attack 3 velocity layers Release samples 2 Alternations			
21 BTr_sus_Vib		Samples: 212	RAM: 13 MB
Sustained, with vibrato 3 velocity layers Release samples			
22 BTr_sus_Vib-progr	Range: E1–C#5	Samples: 160	RAM: 10 MB
Sustained, with progressive vibrato 2 velocity layers Release samples			
23 BTr_sus_noVib		Samples: 212	RAM: 13 MB
Sustained, without vibrato 3 velocity layers Release samples			

02 DYNAMICS**Range: D2–C#5****01 BTr_dyn-me_Vib_1'5s****Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, with vibrato, 1.5 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

02 BTr_dyn-me_Vib_3s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, with vibrato, 3 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

03 BTr_dyn-me_Vib_5s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, with vibrato, 5 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

11 BTr_dyn-me_noVib_1s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, without vibrato, 1 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

12 BTr_dyn-me_noVib_1'5s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, without vibrato, 1.5 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

13 BTr_dyn-me_noVib_2s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, without vibrato, 2 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

14 BTr_dyn-me_noVib_3s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, without vibrato, 3 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo


15 BTr_dyn-me_noVib_4s**Samples: 132****RAM: 8 MB**

Medium crescendo and diminuendo, without vibrato, 4 sec.
 2 velocity layers
 AB switch: crescendo/diminuendo

21 BTr_dyn-str_Vib_3s**Samples: 66****RAM: 4 MB**

Strong crescendo and diminuendo, with vibrato, 3 sec.
 1 velocity layer
 AB switch: crescendo/diminuendo

22 BTr_dyn-str_Vib_4s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, with vibrato, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo			
23 BTr_dyn-str_Vib_6s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, with vibrato, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo			
31 BTr_dyn-str_noVib_1s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, without vibrato, 1 sec. 1 velocity layer AB switch: crescendo/diminuendo			
32 BTr_dyn-str_noVib_1'5s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, without vibrato, 1.5 sec. 1 velocity layer AB switch: crescendo/diminuendo			
33 BTr_dyn-str_noVib_2s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, without vibrato, 2 sec. 1 velocity layer AB switch: crescendo/diminuendo			
34 BTr_dyn-str_noVib_3s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, without vibrato, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo			
35 BTr_dyn-str_noVib_4s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, without vibrato, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo			
36 BTr_dyn-str_noVib_6s		Samples: 66	RAM: 4 MB
Strong crescendo and diminuendo, without vibrato, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo			
40 BTr_pfp_Vib_6s	Range: D#1–C#5	Samples: 40	RAM: 2 MB
Crescendo-diminuendo with vibrato, 6 sec. 1 velocity layer			
41 BTr_pfp_noVib_4s	Range: D#1–C#5	Samples: 40	RAM: 2 MB
Crescendo-diminuendo without vibrato, 4 sec. 1 velocity layer			
42 BTr_pfp_noVib_6s	Range: D#1–C#5	Samples: 40	RAM: 2 MB
Crescendo-diminuendo without vibrato, 6 sec. 1 velocity layer			

43 BTr_pfp_noVib_8s	Range: D#1–C#5	Samples: 40	RAM: 2 MB
Crescendo-diminuendo without vibrato, 8 sec. 1 velocity layer			
51 BTr_fp		Samples: 33	RAM: 2 MB
Fortepiano 1 velocity layer 2 Alternations			
52 BTr_sfz		Samples: 33	RAM: 2 MB
Sforzato 1 velocity layer 2 Alternations			
53 BTr_sffz		Samples: 33	RAM: 2 MB
Sforzatissimo 1 velocity layer 2 Alternations			
03 FLATTER + TRILLS	Range: D2–C#5		
01 BTr_flutter		Samples: 66	RAM: 4 MB
Flutter tonguing 1 velocity layer Release samples			
02 BTr_flutter_cre		Samples: 33	RAM: 2 MB
Flutter tonguing, crescendo 1 velocity layer			
11 BTr_trill_1		Samples: 132	RAM: 8 MB
Trills, minor 2nd 2 velocity layers Release samples			
12 BTr_trill_2		Samples: 126	RAM: 7 MB
Trills, major 2nd 2 velocity layers Release samples			

10 PERF INTERVAL**Range: D2–C#5****01 BTr_perf-legato_noVib****Samples: 794****RAM: 49 MB**

Legato without vibrato
2 velocity layers
Release samples

02 BTr_perf-legato_noVib_sus**Samples: 794****RAM: 49 MB**

Legato without vibrato
Sustain crossfading
2 velocity layers
Release samples

03 BTr_perf-legato_Vib**Samples: 794****RAM: 49 MB**

Legato, with vibrato
2 velocity layers
Release samples

04 BTr_perf-legato_Vib_sus**Samples: 794****RAM: 49 MB**

Legato, with vibrato
Sustain crossfading
2 velocity layers
Release samples

05 BTr_perf-marcato**Samples: 860****RAM: 53 MB**

Marcato
2 velocity layers
Release samples

11 PERF INTERVAL FAST**Range: D2–C#5****01 BTr_perf-legato_fa****Samples: 920****RAM: 57 MB**

Legato, fast
2 velocity layers
Release samples

02 BTr_perf-marcato_fa**Samples: 990****RAM: 61 MB**

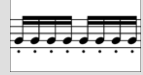
Marcato, fast
2 velocity layers
Release samples

**12 PERF REPETITION****Range: D2–C#5**

01 BTr_perf-rep_leg-sl Repetition performances: Legato, slow 2 velocity layers	Samples: 170	RAM: 10 MB
02 BTr_perf-rep_leg-fa Repetition performances: Legato, fast 2 velocity layers	Samples: 204	RAM: 12 MB
03 BTr_perf-rep_por Repetition performances: Portato 2 velocity layers	Samples: 306	RAM: 19 MB
04 BTr_perf-rep_sta-sl Repetition performances: Staccato, slow 2 velocity layers	Samples: 306	RAM: 19 MB
05 BTr_perf-rep_sta-fa Repetition performances: Staccato, fast 2 velocity layers	Samples: 306	RAM: 19 MB
21 BTr_perf-rep_dyn6_leg-sl Repetition performances: Legato dynamics, slow, 6 repetitions 1 velocity layer AB switch: crescendo/diminuendo	Samples: 204	RAM: 12 MB
22 BTr_perf-rep_dyn6_leg-fa Repetition performances: Legato dynamics, fast, 6 repetitions 1 velocity layer AB switch: crescendo/diminuendo	Samples: 204	RAM: 12 MB
23 BTr_perf-rep_cre9_por Repetition performances: Portato crescendo, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB
24 BTr_perf-rep_cre9_sta-sl Repetition performances: Staccato crescendo, slow, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB
25 BTr_perf-rep_cre9_sta-fa Repetition performances: Staccato crescendo, fast, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB

13 FAST REPETITION

Range: D2–C#5

**01 BTr_fast-rep_150 (160/170/180/200)**

Samples: 132

RAM: 8 MB

Fast repetitions: 150 to 180, and 200 BPM
 2 velocity layers
 Release samples

11 BTr_fast-rep_150_cre (160/170/180/200)

Samples: 33

RAM: 2 MB

Fast repetitions
 Crescendo, 150 to 180, and 200 BPM
 1 velocity layer

14 UPBEAT REPETITION**A Single Upbeat**

Range: D2–C#5

**01 BTr_UB-a1_80 (90/100/110/120/130/140/160/180/200)**

Samples: 66

RAM: 4 MB

1 upbeat, 80–140, 160, 180, and 200 BPM
 2 velocity layers

B Double Upbeats

Range: D2–C#5

**01 BTr_UB-a2_80 (90/100/110/120/130/140/160/180/200)**

Samples: 66

RAM: 4 MB

2 upbeats, 80–140, 160, 180, and 200 BPM
 2 velocity layers

C Triple Upbeats

Range: D2–C#5

**01 BTr_UB-a3_80 (90/100/110/120/130/140/160/180/200)**

Samples: 66

RAM: 4 MB

3 upbeats, 80–140, 160, 180, and 200 BPM
 2 velocity layers



15 GRACE NOTES

01 BTr_grace-1	Range: D2–C5	Samples: 208	RAM: 13 MB
Grace notes, minor 2nd 2 velocity layers Release samples AB switch: up/down			
02 BTr_grace-2	Range: D2–C#5	Samples: 208	RAM: 13 MB
Grace notes, major 2nd 2 velocity layers Release samples AB switch: up/down			

16 FX

01 BTr_duophonic	Range: D2–D#3	Samples: 6	RAM: 1 MB
Effects: Duophonic playing (tone and voice) 1 velocity layer			
02 BTr_duophonic-gliss	Range: G2–F#3	Samples: 10	RAM: 1 MB
Effects: Duophonic playing, glissandos 1 velocity layer AB switch: up/down			
03 BTr_FX-rip	Range: D3–F4	Samples: 13	RAM: 1 MB
Effects: Rips (sliding into the note) 1 velocity layer			
04 BTr_falls	Range: G#3–E5	Samples: 27	RAM: 1 MB
Effects: Falls (sliding down at the end of the note) Play ranges: Short falls G#3–E5, long falls C4–D5 1 velocity layer AB switch: fall short/long			
05 BTr_falls-chrom	Range: C4–D5	Samples: 18	RAM: 1 MB
Effects: Falls, chromatic 1 velocity layer AB switch: fall short/long			

98 RESOURCES

Isolated dynamics repetitions: Legato slow and fast, portato, and staccato
Single layer long notes

01 Perf Rep dyn		Range: D2–C#5	
01 BTr_rep_cre6_leg-sl-1 (2/3/4/5/6)	Samples: 17	RAM: 1 MB	
Extracted repetitions Legato, slow, crescendo, 1st to 6th note 1 velocity layer			
01 BTr_rep_dim6_leg-sl-1 (2/3/4/5/6)	Samples: 17	RAM: 1 MB	
Extracted repetitions Legato, slow, diminuendo, 1st to 6th note 1 velocity layer			
02 BTr_rep_cre6_leg-fa-1 (2/3/4/5/6)	Samples: 17	RAM: 1 MB	
Extracted repetitions Legato, fast, crescendo, 1st to 6th note 1 velocity layer			
02 BTr_rep_dim6_leg-fa-1 (2/3/4/5/6)	Samples: 17	RAM: 1 MB	
Extracted repetitions Legato, fast, diminuendo, 1st to 6th note 1 velocity layer			
03 BTr_rep_cre9_por-1 (2/3/4/5/6/7/8/9)	Samples: 17	RAM: 1 MB	
Extracted repetitions: Portato, crescendo, 1st to 9th note 1 velocity layer			
04 BTr_rep_cre9_sta-1 (2/3/4/5/6/7/8/9)	Samples: 17	RAM: 1 MB	
Extracted repetitions: Staccato, crescendo, 1st to 9th note 1 velocity layer			
02 Long Notes - Single Layer		Range: D2–C#5	
01 BTr_sus_p_noVib	Samples: 73	RAM: 4 MB	
Sustained, piano, without vibrato 1 velocity layer Release samples			
02 BTr_sus_mf_noVib	Samples: 73	RAM: 4 MB	
Sustained, mezzopiano, without vibrato 1 velocity layer Release samples			
03 BTr_sus_f_noVib	Samples: 73	RAM: 4 MB	
Sustained, forte, without vibrato 1 velocity layer Release samples			

99 RELEASE

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

Matrices

Matrix - LEVEL 1

L1 BTr Articulation Combi

Samples: 1210 RAM: 75 MB

Single note articulations

Staccato, portato short, sustained with and without vibrato, crescendo-diminuendo with vibrato 6 sec., fortepiano and sforzato, flutter tonguing normal and crescendo, trills half and whole tone

	C1	C#1	D1	D#1	E1	F1
V1	slac	sus vib.	pfp vib. 6s.	fp	flutter	trill half
V2	port. short	sus no vib.	pfp vib. 6s.	sfz	flutter cres.	trill whole

L1 BTr Perf-Legato Speed

Samples: 1048 RAM: 65 MB

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	sus-XF	normal no vib.	fast

L1 BTr Perf-Repetitions Combi

Samples: 782 RAM: 48 MB

Repetition performances

Legato slow

Portato

Staccato fast

Matrix switches: Vertical: Modwheel, 3 zones

	repetitions
V1	legato slow
V2	portato
V3	staccato fast

Matrix - LEVEL 2 A - Advanced

01 BTr Perf-Universal

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Marcato normal and fast

Speed controller

Matrix switches: Horizontal: Speed, 3 zones Vertical: Modwheel, 2 zones

	H1	H2	H3
legato	sus-XF	normal no vib.	fast
marcato	normal	normal	fast

02 BTr Short+Long notes**Samples: 1480 RAM: 92 MB**

Single notes

Staccato, portato short, portato medium with and without vibrato, portato long with normal, progressive, and without vibrato
Sustained with normal, progressive, and without vibrato**Matrix switches:** Horizontal: Keyswitches, C1–E1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1
V1	staccato	port. short	port.med. vib.	port.long vib.	sus. vib.
V2	%	%	port.med. vib.	port.long prog.vib.	sus. prog. vib.
V3	%	%	port.med. no vib.	port.long no vib.	sus. no vib.

Matrix - LEVEL 2 B - Standard**11 BTr Perf-Legato Speed****Samples: 1048 RAM: 65 MB**

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	sus-XF	normal no vib.	fast

12 BTr Perf-Marcato Speed**Samples: 1118 RAM: 69 MB**

Interval performances^mMarcato normal and fast

Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
marcato	normal	fast

13 BTr Short notes**Samples: 1103 RAM: 68 MB**

Single notes

Staccato, portato short, portato long and medium with and without vibrato

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	staccato	port.short	port.med. vib.	port.med. no vib.	port.long vib.	port.long no vib.

14 BTr Long notes - All**Samples: 391 RAM: 24 MB**

Single notes

Sustained with normal, progressive, and without vibrato

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
sustained	vibrato	prog. vibrato	no vibrato

15 BTr Dynamics - Small**Samples: 495 RAM: 30 MB**

Dynamics

Medium crescendo and diminuendo with vibrato, 1.5, 3, and 5 sec.

Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 4 zones

	C1	C#1	D1
dyn.med. vib.	1.5 sec.	3 sec.	5 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

16 BTr Dynamics - Large**Samples: 1209 RAM: 75 MB**

Dynamics

Medium crescendo and diminuendo with and without vibrato, 1.5, 3, and 5 (4) sec., strong crescendo and diminuendo without vibrato, 2, 3, and 4 sec.

Crescendo-diminuendo without vibrato, 4, 6, and 8 sec.

Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 5 zones

	C1	C#1	D1
dyn.med. vib.	1.5 sec.	3 sec.	5 sec.
dyn.med. no vib.	1.5 sec.	3 sec.	4 sec.
dyn.str. no vib.	2 sec.	3 sec.	4 sec.
pfp no vib.	4 sec. v.1	6 sec. v.2	8 sec.
fp/sfz/sffz	fp	sfz	sffz

17 BTr Flutter**Samples: 99 RAM: 6 MB**

Flutter tonguing

Normal, crescendo, and normal/crescendo with Cell crossfading

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
flutter	normal	crescendo	Cell XF

18 BTr Trills - normal**Samples: 258 RAM: 16 MB**

Trills, minor and major 2nd

Matrix switches: Vertical: Modwheel, 2 zones

	H1
interval	min. 2nd
V2	maj. 2nd

19 BTr FX**Samples: 73 RAM: 4 MB**

Effects: Duophonic playing normal and glissando, rips, and falls normal and chromatic

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	duophonic	duophon.gliss.	rips	falls normal	falls chromatic

Matrix - LEVEL 2 C - Repetitions**31 BTr Perf-Repetitions - Combi****Samples: 1275 RAM: 79 MB**

Repetition performances

Slow and fast legato, portato, slow and fast staccato

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	legato slow	legato fast	portato	staccato slow	staccato fast

32 BTr Perf-Repetitions - Speed**Samples: 969 RAM: 60 MB**

Repetition performances

Slow and fast legato, portato, slow staccato

Speed controller

Matrix switches: Horizontal: Speed, 4 zones

	H1	H2	H3	H4
V1	legato slow	legato fast	portato	staccato slow

33 BTr Fast-Repetitions**Samples: 396 RAM: 24 MB**

Fast repetitions: Staccato, 9 repetitions, 150–180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
speed/BPM	150	160	170	180	200

34 BTr Upbeats a1**Samples: 660 RAM: 41 MB**

Repetitions: 1 upbeat, 80–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–A1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
speed/BPM	80	90	100	110	120	130	140	160	180	200

35 BTr Upbeats a2**Samples: 660 RAM: 41 MB**

Repetitions: 2 upbeats, 80–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–A1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
speed/BPM	80	90	100	110	120	130	140	160	180	200

36 BTr Upbeats a3**Samples: 660 RAM: 41 MB**

Repetitions: 3 upbeats, 80–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–A1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
speed/BPM	80	90	100	110	120	130	140	160	180	200

37 BTr Upbeats all**Samples: 1980 RAM: 123 MB**

Repetitions: 1–3 upbeats, 80–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–A1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
1 upbeat	80	90	100	110	120	130	140	160	180	200
2 upbeats	80	90	100	110	120	130	140	160	180	200
3 upbeats	80	90	100	110	120	130	140	160	180	200

Matrix - LEVEL 2 D - Scale+Phrase**51 BTr Grace notes - All****Samples: 336 RAM: 21 MB**

Grace notes, minor and major 2nd
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
interval	min. 2nd	maj. 2nd

Matrix - LEVEL 2 E - Keyswitch Vel**71 BTr Legato slow - cre6****Samples: 102 RAM: 6 MB**

Slow legato notes: Crescendo, keyswitch velocity
Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
velocity	1st	2nd	3rd	4th	5th	6th

72 BTr Legato fast - cre6**Samples: 102 RAM: 6 MB**

Fast legato notes: Crescendo, keyswitch velocity
Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
velocity	1st	2nd	3rd	4th	5th	6th

73 BTr Portato - cre9**Samples: 153 RAM: 9 MB**

Portato notes: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

74 BTr Staccato - cre9**Samples: 153 RAM: 9 MB**

Staccato notes: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

75 BTr Combi - cre6**Samples: 204 RAM: 12 MB**

Slow and fast legato: Crescendo, keyswitch velocity
Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
legato slow	1st	2nd	3rd	4th	5th	6th
legato fast	1st	%	%	%	%	%

76 BTr Combi - cre9**Samples: 306 RAM: 19 MB**

Portato and staccato: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

77 BTr Legato slow - dim6**Samples: 102 RAM: 6 MB**

Slow legato notes: Diminuendo, keyswitch velocity

Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
velocity	1st	2nd	3rd	4th	5th	6th

78 BTr Legato fast - dim6**Samples: 102 RAM: 6 MB**

Fast legato notes: Diminuendo, keyswitch velocity

Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
velocity	1st	2nd	3rd	4th	5th	6th

79 BTr Combi - dim6**Samples: 204 RAM: 12 MB**

Slow and fast legato: Diminuendo, keyswitch velocity

Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
legato slow	1st	2nd	3rd	4th	5th	6th
legato fast	1st	%	%	%	%	%

Presets

BTr VSL Preset Level 1

Samples: 2894 RAM: 180 MB

L1 BTr Perf-Legato Speed
 L1 BTr Articulation Combi
 L1 BTr Perf-Repetitions Combi

Preset keyswitches: C6–D6

BTr VSL Preset Level 2

Samples: 4665 RAM: 291 MB

01 BTr Perf-Universal
 01 BTr Perf-Universal
 L1 BTr Articulation Combi
 31 BTr Perf-Repetitions - Combi
 76 BTr Combi - cre9

Preset keyswitches: C6–E6